

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~Method A method~~ of converting a series of m-bit information words ~~(1)~~ to a modulated signal ~~(7)~~, with m being an integer, ~~in which said method comprising the steps of:~~
 ~~converting each received information word into an a~~
5 ~~corresponding n-bit code word (4) is delivered for each received~~
 ~~information word (1), with n being an integer exceeding m, and~~
 ~~modulating the corresponding delivered code words (4) are~~
 ~~modulated to form the modulated signal (7),~~
 ~~and in which wherein the converting step converts the~~
10 ~~series of information words is converted to a series of~~
 ~~corresponding~~ code words so that the corresponding modulated signal
 ~~(7) satisfies a predetermined criterion,~~
 ~~and in which wherein the corresponding code words (4) are~~
 spread over at least a group of a first type ~~(G11, G13)~~ and at least
15 a group of a second type ~~(G2)~~, while the delivery of a code word
 belonging to the group of the first type ~~(G11, G13)~~ establishes a
 coding state ~~(G1)~~ of a first type determined by the associated
 group, and the delivery of a code word belonging to the group of
 the second type ~~(G2)~~ establishes one of r coding states ~~(G2, G3)~~ of
20 a second type determined by the associated group ~~and and by the~~
 information word (1) associated to the delivered code word ~~(4)~~,
 in which the group of the second type comprises at least one code
 word being associated with at most r information words among which

the respective information word is distinguishable by evaluating a
25 predetermined parameter of the following code word,
characterized in that

~~said step of converting each information word comprises the sub-~~
~~steps:~~

~~..... providing each information word is provided with an~~
30 associated subset of code words comprising at least r code words
~~mutually differing in the value of the predetermined parameter^{r-1};~~
and

~~..... selecting the delivered corresponding code word is~~
~~selected based on an additional criterion from the subset of code~~
35 words excluding all code words not complying with said
predetermined criterion and, in the event that a coding state of
the second type has been established by the preceding code word,
excluding all code words having a value of the predetermined
parameter not corresponding to the established coding state of the
40 second type.

2. (Currently Amended) ~~Method The method~~ as claimed in claim
1, wherein the additional criterion is controlling a low frequency
content of the modulated signal.

3. (Currently Amended) ~~Method The method~~ as claimed in Claim
2, wherein a running digital sum value is established as a measure
for the low frequency content, ~~which said running digital sum value~~
~~is being determined over a portion of the modulated signal (7) and~~

5 | denotes, for this portion, the current value of a difference
between the number of bit cells having a first signal value and the
number of bit cells having a second signal value, while said
selection of the code word is made so as to constrain the digital
sum value.

4. (Currently Amended) ~~Method~~The method as claimed in claim
1, wherein the value of the predetermined parameter is the logical
value of p predetermined bits.

5. (Currently Amended) ~~Method~~The method as claimed in claim
4, wherein the p predetermined bits are the first and thirteenth
bit position.

6. (Currently Amended) ~~Method~~The method as claimed in claim
1, wherein the additional criterion is encoding further
information.

7. (Currently Amended) ~~Method~~The method as claimed in Claim
1, wherein the modulated signal satisfies as the predetermined
criterion that each number of successive bit cells having a same
signal value is at least $d+1$ and at most $k+1$.

8. (Currently Amended) ~~Method~~The method as claimed in Claim
7, wherein d is equal to 2 and k is equal to 10.

9. (Currently Amended) ~~Method~~ ~~The method~~ as claimed in Claim 1, wherein m is equal to 8 and n is equal to 16.

10. (Currently Amended) ~~Method~~ ~~The method~~ as claimed in claim 1, wherein a record carrier ~~(120)~~ is produced by providing a substrate with an information pattern ~~(123, 124)~~ representing the modulated signal ~~(7)~~.

11. (Currently Amended) ~~Coding~~ ~~A device~~ ~~(140)~~ comprising:
.....an m-to-n bit converter ~~(60)~~ for converting the m-bit information words to n-bit code words, and
.....means ~~(66, 63)~~ for modulating the n-bit code words to a modulated signal, the modulated signal satisfying a predetermined criterion, and
.....state establishing means ~~(64)~~ for establishing, on the delivery of a code word by the converter, a coding state of a first type ~~(S1)~~ for each of the delivered code words belonging to a group ~~(G11, G12)~~ of a first type determined by the associated group, and one of r coding states ~~(S2, S3)~~ of a second type for each of the delivered code words belonging to a group ~~(G2)~~ of the second type determined by the associated group ~~and~~ ~~and~~ by the information word associated to the delivered code word,

15 in which the group of the second type comprises at least one code word being associated with at most r information words among which the respective information word is distinguishable by evaluating a predetermined parameter of the following code word,

characterized in that

20 the m-to-n-bit converter ~~(60)~~ comprises:
_____ means for providing _____ for each information word, an
associated subset of code words comprising at least r second type
of code words mutually differing in a predetermined way, ~~_____~~ and
_____ means for selecting a code word based on an additional
25 criterion from the subset of code words excluding all code words
not complying with said predetermined criterion and, in the event
that a coding state of the second type has been established by the
preceding code word, excluding all code words having a value of the
predetermined parameter not corresponding to the established coding
30 state of the second type.

12. (Currently Amended) ~~Coding~~ The coding device as claimed in
claim 11, wherein the coding device further comprises:
_____ means ~~(141, 142)~~ for recording information on a record
carrier ~~(143)~~ by recording an information pattern representing the
5 modulated signal.

13. (Currently Amended) ~~Signal~~ A signal comprising a sequence
of successive signal portions ~~(8)~~ each corresponding to an
information word, the signal satisfying a predetermined criterion,
in which ~~signal~~ each of the signal portions ~~(8)~~ comprises n bit
5 cells having a first or second signal value, a signal portion
belonging to a group ~~(G11, G12)~~ of a first type of signal portions
uniquely representing an information word, and a signal portion

belonging to a group ~~(G2)~~ of a second type of signal portions in combination with a successive signal portion representing a unique information word, at least one signal portion of the group of the second type being associated with at most r information words among which the respective information word is distinguishable by evaluating a predetermined parameter of the successive signal portion,

characterized in that the signal comprises at least one signal portion selected based on an additional criterion from a subset of signal portions excluding all signal portions not complying with said predetermined criterion and, in the event that the preceding signal portion belongs to the group of the second type, excluding all signal portions having a value of the predetermined parameter not being associated with the respective information word, and the subset being associated to an information word and comprising at least r signal portions mutually differing in the value of the predetermined parameter.

14. (Currently Amended) ~~Signal-The signal~~ as claimed in claim 13, wherein the additional criterion is a low frequency content of the modulated signal.

15. (Currently Amended) ~~Signal-The signal~~ as claimed in claim 13, wherein the predetermined parameter is the logical value of p predetermined bits.

16. (Currently Amended) ~~Record~~ A record carrier ~~(120)~~ on which
a signal ~~(7)~~ as claimed in claim 13 is provided in a track in which
information patterns ~~(123, 124)~~ represent the signal portions ~~(8)~~,
which ~~said~~ information patterns ~~comprise~~ comprising first and
5 second parts ~~(123, 124)~~ alternating in the direction of the track,
the first parts ~~present~~ presenting detectable first properties and
the second parts ~~present~~ presenting second properties
distinguishable from the first properties, and the parts having the
first properties ~~represent~~ representing bit cells having the first
10 signal value, and the parts having the second properties ~~represent~~
representing the bit cells having the second signal value.

17. (Currently Amended) ~~Rendering~~ A rendering device
comprising:
..... means for reading information from a track ~~(9)~~ on a record
carrier, ~~which device comprises~~
5 means for scanning the track, ~~and~~
..... demodulation means for retrieving code words from signal
portions ~~(8)~~ of a signal provided in the track, the signal
satisfying a predetermined criterion, in which ~~signal~~ each of the
signal portions ~~(8)~~ comprises n bit cells having a first or second
10 signal value, a signal portion belonging to a group ~~(C11, C12)~~ of a
first type of signal portions uniquely representing an information
word, and a signal portion belonging to a group ~~(C2)~~ of a second

type of signal portions in combination with a successive signal
portion representing a unique information word, ~~and~~

15 ~~and~~ a converter for converting the code words into
information words, the converter comprising means for
distinguishing the respective information word by evaluating a
predetermined parameter of the following code word,
characterized in that

20 the converter comprises means for converting a code word selected
from a subset of code words, the subset being associated to the
information word and comprising at least r code words mutually
differing in the value of the predetermined parameter.

18. (Currently Amended) ~~Device~~ ~~The rendering device as claimed~~
in claim 17, wherein the converter comprises means for detecting an
additional criterion from the selection of the code word from the
subset.